

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 7,060,287 B1
APPLICATION NO. : 09/626326
DATED : June 13, 2006
INVENTOR(S) : William G. Hubbard and Timothy R. Devine

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In the claims, column 22, line 43 through column 26, line 62 delete claims 1-73 and insert:

- 1. A tissue augmentation material, comprising a polysaccharide gel having a viscosity between greater than about 200,000 to about 250,000 centipoise and a biomaterial, wherein the polysaccharide gel maintains the biomaterial homogeneously suspended in the tissue augmentation material prior to augmentation of a desired tissue site and during introduction of the tissue augmentation material to the desired site.
2. The tissue augmentation material according to claim 1, wherein the polysaccharide gel is an aqueous polysaccharide gel.
3. The tissue augmentation material according to claim 1, wherein the polysaccharide gel comprises a polysaccharide selected from the group consisting of a cellulose polysaccharide, starch, chitin, chitosan, hyaluronic acid, hydrophobe modified polysaccharide, an alginate, a carrageenan, agar, agarose, an intramolecular complex of a polysaccharide, an oligosaccharide and a macrocyclic polysaccharide.
4. A tissue augmentation material, comprising a polysaccharide gel having a viscosity between greater than about 200,000 to about 250,000 centipoise and a biomaterial, wherein the polysaccharide gel maintains the biomaterial homogeneously suspended in the tissue augmentation material prior to augmentation of a desired tissue site and during introduction of the tissue augmentation material to the desired site, wherein the polysaccharide gel comprises a cellulose polysaccharide.
5. The tissue augmentation material according to claim 4, wherein the cellulose polysaccharide is selected from the group consisting of sodium carboxymethylcellulose, agar methylcellulose, hydroxypropyl methylcellulose, ethylcellulose, microcrystalline cellulose and oxidized cellulose.
6. The tissue augmentation material according to claim 5, wherein the cellulose polysaccharide is sodium carboxymethylcellulose.
7. The tissue augmentation material according to claim 1, wherein the polysaccharide gel comprises a solvent selected from the group consisting of water and aqueous alcohol.

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8. A tissue augmentation material, comprising a polysaccharide gel having a viscosity between greater than about 200,000 to about 250,000 centipoise and a biomaterial, wherein the polysaccharide gel maintains the biomaterial homogeneously suspended in the tissue augmentation material prior to augmentation of a desired tissue site and during introduction of the tissue augmentation material to the desired site , wherein the polysaccharide gel comprises a solvent selected from the group consisting of water and aqueous alcohol and further wherein the aqueous alcohol is selected from the group consisting of aqueous glycerol, aqueous isopropyl alcohol, aqueous ethanol, aqueous ethylene glycol and mixtures thereof.

9. A tissue augmentation material, comprising glycerin, a polysaccharide gel having a viscosity between greater than about 200,000 to about 250,000 centipoise and a biomaterial, wherein the polysaccharide gel maintains the biomaterial homogeneously suspended in the tissue augmentation material prior to augmentation of a desired tissue site and during introduction of the tissue augmentation material to the desired site and further wherein the polysaccharide gel is an aqueous polysaccharide gel.

10. A tissue augmentation material, comprising a polysaccharide gel having a viscosity between greater than about 200,000 to about 250,000 centipoise and a biomaterial, wherein the polysaccharide gel maintains the biomaterial homogeneously suspended in the tissue augmentation material prior to augmentation of a desired tissue site and during introduction of the tissue augmentation material to the desired site, wherein water and the glycerin are present in the aqueous polysaccharide gel in a ratio of from about 20 to 90:80 to 10.

11. A tissue augmentation material, comprising a polysaccharide gel having a viscosity between greater than about 200,000 to about 250,000 centipoise and a biomaterial, wherein the polysaccharide gel maintains the biomaterial homogeneously suspended in the tissue augmentation material prior to augmentation of a desired tissue site and during introduction of the tissue augmentation material to the desired site, wherein the water and the glycerin are present in the gel in a ratio of about 85:15.

12. The tissue augmentation material according to claim 10, wherein the biomaterial is selected from the group consisting of a ceramic, a plastic and a metal.

13. The tissue augmentation material according to claim 12, wherein the biomaterial is a ceramic.

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14. The tissue augmentation material according to claim 13, wherein the ceramic comprises rounded, substantially spherical, biocompatible, substantially nonresorbable, finely divided ceramic particles.

15. The tissue augmentation material according to claim 14, wherein the ceramic particles are selected from the group consisting of calcium phosphate particles, calcium silicate particles, calcium carbonate particles and alumina particles.

16. A biocompatible, resorbable, lubricous carrier for suspending a biomaterial in a tissue augmentation material, comprising a polysaccharide gel having a viscosity between greater than about 200,000 to about 250,000 centipoise and a biomaterial, wherein the polysaccharide gel maintains the biomaterial homogeneously suspended in the tissue augmentation material prior to augmentation of a desired tissue site and during introduction of the tissue augmentation material to the desired site, wherein the biomaterial comprises rounded, substantially spherical, biocompatible, substantially nonresorbable, finely divided ceramic particles, and wherein the ceramic particles are calcium phosphate particles.

17. The carrier according to claim 16, wherein the calcium phosphate particles are selected from the group consisting of calcium hydroxyapatite particles, tetracalcium phosphate particles, calcium pyrophosphate particles, tricalcium phosphate particles, octacalcium phosphate particles, calcium fluorapatite particles, calcium carbonate apatite particles and mixtures thereof.

18. The carrier according to claim 17, wherein the calcium phosphate particles are calcium hydroxyapatite particles.

19. The carrier according to claim 1, wherein the desired tissue site is an osseous site.

20. The carrier according to claim 19, wherein the desired tissue site is an osseous site in a state of osteoporosis.

21. A biocompatible composition for augmenting tissue, comprising a biomaterial for augmenting a desired tissue site and a biocompatible, resorbable, lubricous carrier for the biomaterial, the carrier comprising a polysaccharide gel having a viscosity between greater than about 200,000 to about 250,000 centipoise, wherein the carrier maintains the biomaterial homogeneously suspended in the biocompatible composition prior to augmentation of a desired tissue site and during introduction of the biocompatible composition to the desired site.

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

22. The composition according to claim 21, wherein the polysaccharide gel is an aqueous polysaccharide gel.

23. The composition according to Claim 21, wherein the polysaccharide gel comprises a polysaccharide selected from the group consisting of a cellulose polysaccharide, starch, chitin, chitosan, hyaluronic acid, hydrophobe modified polysaccharide, an alginate, a carrageenan, agar, agarose, an intramolecular complex of a polysaccharide, an oligosaccharide and a macrocyclic polysaccharide.

24. A biocompatible composition for augmenting tissue, comprising a biomaterial for augmenting a desired tissue site and a biocompatible, resorbable, lubricous carrier for the biomaterial, the carrier comprising a polysaccharide gel having a viscosity between greater than about 200,000 to about 250,000 centipoise, wherein the carrier maintains the biomaterial homogeneously suspended in the biocompatible composition prior to augmentation of a desired tissue site and during introduction of the biocompatible composition to the desired site wherein the polysaccharide gel comprises a cellulose polysaccharide.

25. The composition according to claim 24, wherein the cellulose polysaccharide is selected from the group consisting of sodium carboxymethylcellulose, agar methylcellulose, hydroxypropyl methylcellulose, ethylcellulose, microcrystalline cellulose and oxidized cellulose.

26. The composition according to claim 25, wherein the cellulose polysaccharide is sodium carboxymethylcellulose.

27. The composition according to claim 21, wherein the polysaccharide gel comprises a solvent selected from the group consisting of water and aqueous alcohol.

28. The composition according to claim 24, wherein the polysaccharide gel comprises a solvent selected from the group consisting of water and aqueous alcohol and further wherein the aqueous alcohol is selected from the group consisting of aqueous glycerol, aqueous isopropyl alcohol, aqueous ethanol, aqueous ethylene glycol and mixtures thereof.

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29. A biocompatible composition for augmenting tissue, comprising glycerin, a biomaterial for augmenting a desired tissue site, and a biocompatible, resorbable, lubricous carrier for the biomaterial, the carrier comprising a polysaccharide gel having a viscosity between greater than about 200,000 to about 250,000 centipoise, wherein the carrier maintains the biomaterial homogeneously suspended in the biocompatible composition prior to augmentation of a desired tissue site and during introduction of the biocompatible composition to the desired site.

30. A biocompatible composition for augmenting tissue, comprising a biomaterial for augmenting a desired tissue site and a biocompatible, resorbable, lubricous carrier for the biomaterial, the carrier comprising a polysaccharide gel having a viscosity between greater than about 200,000 to about 250,000 centipoise, wherein the carrier maintains the biomaterial homogeneously suspended in the biocompatible composition prior to augmentation of a desired tissue site and during introduction of the biocompatible composition to the desired site, wherein water and the glycerin are present in the aqueous polysaccharide gel in a ratio of from about 20 to 90:80 to 10.

31. The composition according to claim 30, wherein the water and glycerin are present in the aqueous polysaccharide gel in a ratio of about 85:15.

32. The composition according to claim 21, wherein the biomaterial is selected from the group consisting of a ceramic, a plastic and a metal.

33. The composition according to claim 32, wherein the biomaterial is a ceramic.

34. The composition according to claim 33, wherein the ceramic comprises smooth, rounded, substantially spherical, biocompatible, substantially nonresorbable, finely divided ceramic particles.

35. The composition according to claim 34, wherein the ceramic particles are selected from the group consisting of calcium phosphate particles, calcium silicate particles, calcium carbonate particles and alumina particles.

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36. A biocompatible composition for augmenting tissue, comprising a biomaterial for augmenting a desired tissue site and a biocompatible, resorbable, lubricous carrier for the biomaterial, the carrier comprising a polysaccharide gel having a viscosity between greater than about 200,000 to about 250,000 centipoise, wherein the carrier maintains the biomaterial homogeneously suspended in the biocompatible composition prior to augmentation of a desired tissue site and during introduction of the biocompatible composition to the desired site, wherein the biomaterial comprises rounded, substantially spherical, biocompatible, substantially nonresorbable, finely divided ceramic particles, and wherein the ceramic particles are calcium phosphate particles.

37. The composition according to claim 36, wherein the calcium phosphate particles are selected from the group consisting of calcium hydroxyapatite particles, tetracalcium phosphate particles, calcium pyrophosphate particles, tricalcium phosphate particles, octacalcium phosphate particles, calcium fluorapatite particles, calcium carbonate apatite particles and mixtures thereof.

38. The composition according to claim 37, wherein the calcium phosphate particles are calcium hydroxyapatite particles.

39. The composition according to claim 21, wherein the desired tissue site is an osseous site.

40. The composition according to claim 21, wherein the desired tissue site is an osseous site in a state of osteoporosis.

41. In a biocompatible composition for augmenting tissue, the biocompatible composition comprising a biomaterial for augmenting a desired tissue site and a biocompatible, resorbable, lubricous carrier for the biomaterial, the improvement comprising a polysaccharide gel carrier, having a viscosity between greater than about 200,000 to about 250,000 centipoise, the carrier maintaining the biomaterial homogeneously suspended in the biocompatible composition prior to augmentation of a desired tissue site and during introduction of the biocompatible composition to the desired site.

42. The tissue augmentation material according to claim 1, further comprising an additive.

43. The tissue augmentation material according to claim 42, wherein the additive is selected from the group consisting of a pH buffer, a stabilizer, and a surfactant.

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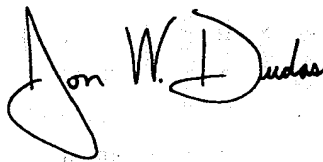
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44. The composition according to claim 21, further comprising an additive.
45. The composition according to claim 44, wherein the additive is selected from the group consisting of a pH buffer, a stabilizer, and a surfactant.--

Signed and Sealed this

Sixteenth Day of January, 2007

A handwritten signature in black ink, reading "Jon W. Dudas". The signature is stylized, with a large loop for the "J" and a cursive "Dudas".

JON W. DUDAS
Director of the United States Patent and Trademark Office

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